Defense Information Systems Agency
Department of Defense

SPECTRUM XXI Status Briefing for DoD Spectrum Workshop

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Joint Spectrum Center
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Disclaimer

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Briefing Overview

- SPECTRUM XXI (Legacy) Status
- SPECTRUM XXI Online
- Development Roadmap
- Transition Issues
- Dependencies and Interactions
- Subject Matter Experts Working Group (SME WG)

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SPECTRUM XXI (Legacy) Status

- **Required upgrade to some SPECTRUM XXI servers for Oracle 10.2.04 has been delayed**
  - **Central, CONUS, and CENTCOM servers upgraded**
  - **EUCOM and PACOM server upgrades delayed**
  - **Clients older than v4.2.4 experience extremely long data exchange sessions (8+ hours) w/ upgraded servers**
  - **Service/COCOM certification & accreditation needed to install v4.2.4 client software**
- **SPECTRUM XXI server in use by NATO in Afghanistan**
  - **Primary Coalition server deployed in theater**
  - **Backup server planned for NATO HQs**

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SPECTRUM XXI (Legacy) Training

- **Only two classes for legacy software remaining**
  - **Last two classes scheduled: 06-15 Jan & 16-25 Mar 2010**
  - **Training will be redirected to SPECTRUM XXI Online**
- **SPECTRUM XXI (Legacy) training will continue at Service schools**
- **Sponsor funded training will be considered, if feasible**

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SPECTRUM XXI Online

- **SPECTRUM XXI Online implements SMTI technology**
  - **Enhanced analysis techniques, sophisticated user interfaces, and a flexible infrastructure**
  - **Web Service connections from other Pub 8 capable systems/tools**
  - **User interface based on MCEB Pub 8/SSRF**
  - **Effective and efficient for all spectrum operations**
- **Early release (v1.2.1) is available with limited capability**
  - **Create new proposals & advance them for processing**
  - **First generation analysis enhancements for proposal and ad hoc analysis**
  - **Limited access: Relocation users, SME WG, select others**
- **First general use release (v2.0) available in July 2010**
- **SMTI R&D will continue through early FY12**

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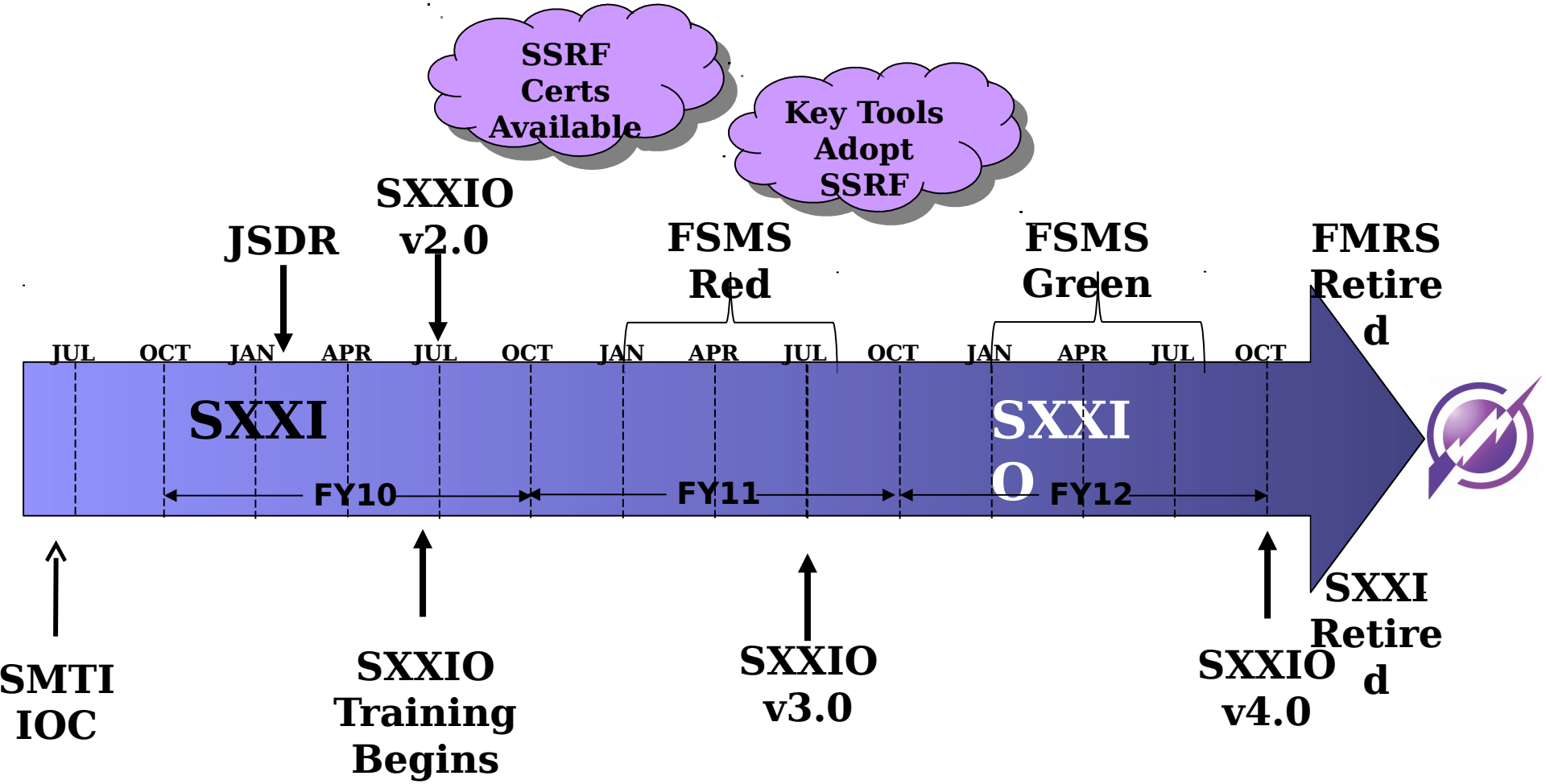
Transition Timeline



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SXXIO V2 Training Timeline

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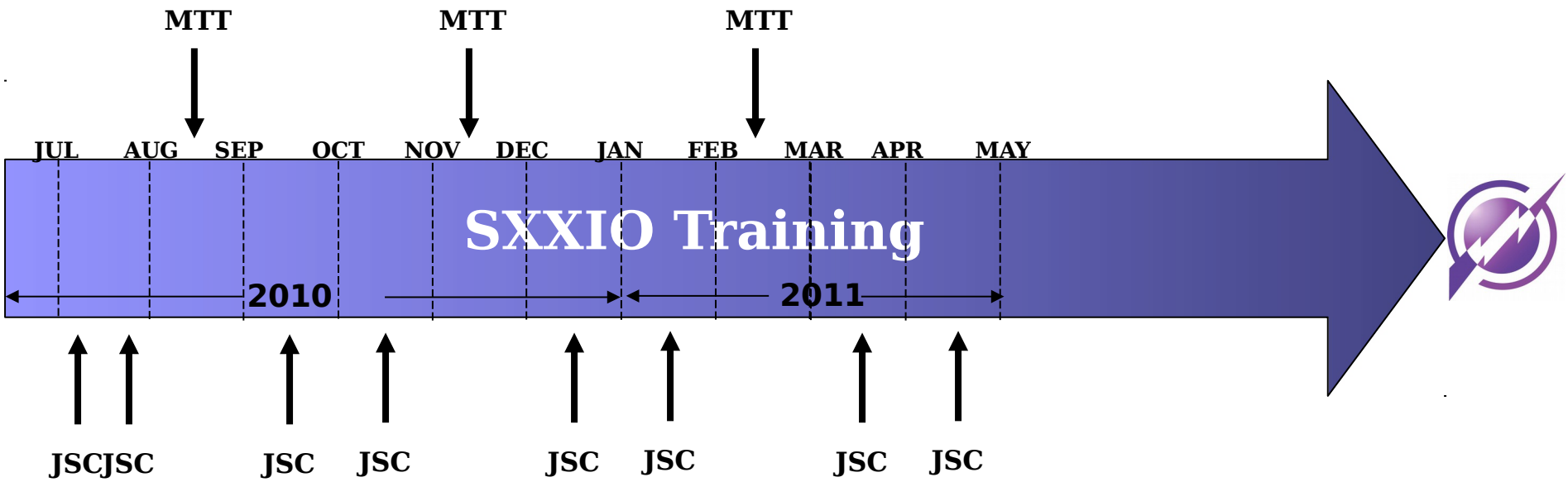

MTT – Mobile Training Team

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Development Roadmap

	Legacy	Jun 2009	Jun 2010
Version	**SPECTRUM XXI**	**SXXIO SM IOC**	**SXXIO SM V2.0**
Data Standard	Pub 7 / SFAF	Pub 8 / SSRF	Pub 8 / SSRF
Primary Capabilities	Proposal Create/Edit Proposal Submission Assignment Review Interference Analysis Point-to-Point Analysis Coverage Plot Frequency Nomination EW Deconfliction JRFL Management JSIR Report Creation	Application wizards Interactive map Pub 7 compliance Engineering analysis • Point-to-Point • Coverage • Talk-Back • Interference • Record conflict chart • Category record exclusion	SM IOC capabilities +: Enhanced map GIS Web Services • Half-duplex nominations • Enhanced link analysis • CDF calculations • Enhanced EME record ID • Improved mobility analysis
Interfaces	PMRS	SPECTRUM XXI	SXXI (info), Reduced use
Databases	JETS, SCS	JETS, SCS	JETS, SCS, HNSWDO
Users	All Users	JSC, Limited Users	Service FMOs and Installations
User Environment	Client / Server SIPRNet	Web Application SIPRNet	Web App / Single DECC SIPRNet
Training Environment	Schools: BSM, ESMC Help Desk: SXXI	Schools: JSC Help Desk: SXXI	Schools: JSC, Online, MTT Help Desk: Consolidated

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Development Roadmap (cont'd)

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Version	Incremental SXXIO SM V2.x	2011 SXXIO SM V3	2012 SXXIO SM V4
Data Standard	Pub 8 / SSRF	Pub 8 / SSRF	Pub 8 / SSRF
Primary Capabilities	SMv2.0 capabilities +: Pub 8 compliance checks Engineering Enhancements ▪ NTIA Algorithms ▪ Enhanced defaults ▪ Harmonic ▪ More Fixed & Mobile logic ▪ Allotment plan editor ▪ Workflow reports ▪ Spectrum occupancy chart ▪ JSIR report submission	SMv2.x capabilities +: White Board Mass change CEOI JRFL Engineering Enhancements • EW Deconfiliction • Co-site	SMv3 capabilities +: Unconstrained SSRF proposals • Named Polygons • Multi-Link Engineering Enhancements • Polygons & Multi-Link • Timeframe deconfliction JSIR workflow TOA Editor Delete History management
Interfaces	FSMS SPECTRUM XXI (info)	FSMS SPECTRUM XXI (info)	FSMS SPECTRUM XXI (legacy)
Databases	JSDR	JSDR FRRS Migration	JSDR
User Migration	JFMOs and Tactical	JFMOs and Tactical Installation and Training	All Remaining Users
User Environment	Web App / Multi-DECC SIPRNet Ops NIPRNet Tng / Demo	Web App / Multi-DECC SIPRNet Ops NIPRNet Ops / Tng / Demo	Web App / Multi-DECC SIPRNet Ops NIPRNet Ops / Tng / Demo
Training Environment	Schools: JSC, Online, MTT Help Desk: Consolidated	Schools: JSC, ESMC, BSM, Online Help Desk: Consolidated	Schools: JSC, ESMC, BSM, Online Help Desk: Consolidated

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Transition Planning

- **Service and COCOM input needed for planning**
  - **Record migration plan agreement**
  - **Identification of early adopters by organizations**
  - **Draft Transition Plan provided to SME WG**
  - **Must be inclusive of all “Spectrum Operators”**
- **Issues that affect retirement of legacy system**
  - **Deployment of FSMS at NTIA**
  - **Other tool migration to SSRF**
  - **Availability of SSRF certification/supportability records**
  - **Support for disconnected users is needed**
  - **Time for record migration to SSRF**

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Transition Issues

- **Data/Record Migration from SFAF to SSRF**
  - Migrate assignments one-by-one
  - Enforce current compliance checks
  - Plan for accelerated migration for some record types or organizations
- **Parallel Operations**
  - SXXIO will write back to SXXI read-only copies
  - SXXIO will analyze SXXI records
  - SXXIO will use SXXI records to start modification proposals
- **Timeline depends on transition plan feedback, budgets, and other interdependent considerations**
- **Timing of FSMS fielding**

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Dependencies and Interactions

- **Data Dependencies**
  - **Pub 8/SSRF Equipment Certification records needed to improve data quality**
    - **SCS and EL-CID records cannot be linked to Pub 8 assignments**
    - **HNSWDO data for HN supportability**
    - **No tool or repository currently exists for Pub 8 certification records**
  - **Other information also needed to build Pub 8/SSRF records**
    - **Organizations**
    - **Job Accounts**
    - **POCs**
- **System Dependencies**
  - **JSDR, for retrieval of equipment and certification data, and ITU, FCC, and Canadian frequency records**
  - **FSMS, for submission of SSRF-compatible proposals to NTIA**
- **Interaction with 3rd party applications (standalone operations)**
  - **CJSMPT**
  - **SPEED**
  - **WIN-T**
  - **AESOP**

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Training

- **Training Courses**
  - **40 hour (est.) resident course starting in July 2010**
  - **Online self-paced training will be available**
  - **Mobile training teams, as available**
  - **Service schools**
  - **JSC will work with Services and COCOMs to determine best methods**
- **Training Environments**
  - **Local server installation too expensive**
  - **JSC unclassified server suite**
  - **Service schools and MTTs will need NIPRNet access**

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SME WG Status

- **Meetings**
  - **Twice monthly since June 2009**
  - **Telecon and, as needed, WebMeeting for remote participants**
  - **Significant feedback received and incorporated into software**
  - **Meeting read-aheads and minutes distributed by email and posted on DKO: http://www.us.army.mil/suite/page/555928**
- **Workshops**
  - **SMTI Requirements Validation in April 2008**
  - **Road Map review at DoD Workshop in October 2008**
  - **SMTI Functional Specification Review in October 2009**
- **Configuration Control Board (CCB)**
  - **Briefed full SPECTRUM XXI CCB in June 2009**

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SME WG Voting Members

- Army (ASMO)
- Navy (NMSC)
- Air Force (AFFMA)
- Marine Corps (HQMC C4)
- Coast Guard
- Joint Staff (J65A)
- JSC (J3)
- DoD Agencies
- NTIA (OSM)

PACOM, CENTCOM, and RCC/FMG are also regular participants.
Must be modified to represent all "Spectrum Operators"

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Summary

- **SPECTRUM XXI Online will provide:**
  - **better analysis**
  - **friendly interface**
  - **Improved data quality**
  - **Improved and near-seamless data sharing**
- **Largest set of new capabilities in July 2010**
- **Data cleanup and new information needed to migrate**
- **Third party applications need to transition to Pub 8**
- **SME WG and CCB members are your representatives throughout the development**

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